AMENDMENTS TO THE CLAIMS

IN THE CLAIMS:

The following listing of claims replaces all prior versions:

1. (Previously Presented) Apparatus for producing continuously molded bodies from a molding material, such as a spinning solution containing cellulose, water and tertiary amine oxide, comprising a multitude of extrusion orifices through which during operation the molding material can be extruded into continuously molded bodies, a precipitation bath and an air gap arranged between the extrusion orifices and the precipitation bath, and a blowing means for producing a cooling gas stream, the continuously molded bodies being passed during operation in successive order through the air gap and the precipitation bath, and the cooling gas stream being directed in the area of the air gap to the continuously molded bodies, the cooling gas stream being turbulent at least at the exit from the blowing means.

2. (Previously Presented) The apparatus according to claim 1, wherein the cooling gas stream has a Reynolds number (Re) of at least 2,500 based on its width (B), measured substantially in the direction of passage of the continuously molded bodies through the air gap, and on its velocity in the direction of flow, and the viscosity (ν) of the cooling flow medium.

3. (Previously Presented) The apparatus according to claim 2, wherein the Reynolds number is at least 3,000.

4. (Previously Presented) The apparatus according to claim 1, wherein the velocity of the cooling stream is at least 30 m/s.

5. (Previously Presented) The apparatus according to claim 4, wherein the velocity of the cooling gas stream is at least 40 m/s.

6. (Previously Presented) The apparatus according to claim 5, wherein the velocity of the cooling stream is at least 50 m/s.

7. (Previously Presented) The apparatus according to claim 1, wherein the width of the cooling stream at the exit is not more than 2 mm.

8. (Previously Presented) The apparatus according to claim 7, wherein the width of the cooling gas stream at the exit is not more than 1mm.

9. (Previously Presented) The apparatus according to claim 1, wherein the specific blowing force of the cooling gas stream is at least 5 mN/mm.

10. (Previously Presented) The apparatus according to claim 9, wherein the specific blowing force of the cooling gas stream is at least 10 mN/mm.

11. (Previously Presented) The apparatus according to claim 1, wherein the cooling gas stream is turbulent in the area of the first row of continuously molded bodies on which it impinges.

12. (Previously Presented) The apparatus according to claim 1, wherein the air gap comprises a first shielding zone by which the cooling gas stream is separated from the extrusion orifices.

13. (Previously Presented) The apparatus according to claim 12, further comprising, apart from the first shielding zone, a second shielding zone through which the cooling area is separated from the precipitation bath surface.

14. (Previously Presented) The apparatus according to claim 1, wherein the boundary area facing the extrusion orifices and located between the cooling area and the first shielding zone extends substantially in parallel with a plane in which the extrusion orifices are positioned on average.

15. (Currently Amended) The apparatus according to claim 1, wherein the extrusion orifices are arranged on a substantially rectangular base in rows in a direction transverse to the direction of the cooling gas stream.

16. (Previously Presented) The apparatus according to claim 4, wherein the number of the extrusion orifices in row direction is greater than in the cooling gas stream direction.

17. (Previously Presented) The apparatus according to claim 1, wherein the precipitation bath has disposed therein a deflector by which during operation the continuously molded bodies are deflected as a substantially planar curtain to the precipitation bath surface, and that outside of the precipitation bath there is provided a bundling means by which during operation the continuously molded bodies are united to form a fiber bundle.

18. (Previously Presented) The apparatus according to claim 1, wherein the width (D) of the cooling gas stream in a direction transverse to the direction of the passage of the continuously molded bodies through the air gap is larger that the height (B) of the cooling gas stream in the direction of passage.

19. (Previously Presented) The apparatus according to claim 1, wherein the cooling gas stream is composed of a plurality of individual cooling gas streams.

20. (Previously Presented) The apparatus according to claim 8, wherein the individual cooling gas streams are arranged side by side in row direction.

21. (Previously Presented) The apparatus according to claim 1, wherein the cooling gas stream is designed as a turbulent air flow in the area where the continuously molded bodies are passed through the air gap.

22 (Previously Presented) The apparatus according to claim 1, wherein the cooling gas stream has a velocity component oriented into the direction of passage.

23. (Previously Presented) The apparatus according to claim 1, wherein the molding material prior to its extrusion has a zero shear viscosity of at least 10000 Pas, at 85°C.

24. (Currently Amended) The apparatus according to claim 1, wherein the distance of the cooling area from extrusion orifice in the direction of passage is at least 2 mm each time.

25. (Previously Presented) The apparatus according to claim 1, wherein the distance I of the cooling area in the direction of passage from each extrusion orifice in millimeters satisfies the following inequality:

$$I > H + A \bullet [\tan(\beta) - 0.14]$$

where H is the distance of the upper edge of the cooling gas stream in the direction of passage from the plane of the extrusion orifices at the exit from the blowing means in millimeters, A is the distance in a direction transverse to the direction of passage between the exit of the cooling gas stream of the blowing means in millimeters and the row of the continuously molded bodies that is the last one in flow direction, in millimeters, and β is the angle in degrees between the cooling gas stream direction and the direction transverse to the direction of passage.

26. (Previously Presented) The apparatus according to claim 1, wherein the height L of the air gap in the direction of passage in millimeters satisfies the following inequality:

$$L > I + 0.28 \bullet A + B$$

where I is the distance of the cooling area from the extrusion orifices in the area where the continuously molded bodies are passed through the air gap, A is the distance in a direction transverse to the direction passage between the exit of the cooling gas stream from the blowing means and the row of the continuously molded bodies that is the last one in flow direction, in millimeters, and B is the height of the cooling gas stream in a direction transverse to the cooling gas stream direction in the direction of passage at the exit of the cooling gas stream from the blowing means.

27. (Cancelled)